

Notice of Allowability	Application No.	Applicant(s)	
	10/697,548	LEVENE ET AL.	
	Examiner	Art Unit	
	Sajous Wesner	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/7/05.
2. ☒ The allowed claim(s) is/are 52-62.
3. ☒ The drawings filed on 20 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>6/20/05</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

DETAILED ACTION

Remark

This communication is responsive to reply filed on 3/7/2005. Claims 52-62 are presented for examination.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Haulbrook on 6/17/05.

The application has been amended as follows: cancel claims 1-51.

In claim 52, at line 10, delete "at least one" and at line 13, after ":", insert --or--.

Allowable Subject Matter

2. Claims 52-62 are allowed over the prior art.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a graphics rendering method that is configured to support rendering of complex virtual objects, while still allowing a user to interactively

Art Unit: 2676

paint directly onto the object in object space; and blending the texture while maintaining the interactivity of painting, without creating graphical artifacts.

The best prior art of record: Maillot et al. (US 20030048277) teaches a system that allows a user to paint directly onto a three-dimensional object (see paragraphs 17-19), and after the polygons under the brush to be painted are determined, they can be rendered by mapping the brush texture onto the surface texture. See paragraph 70.

And, Kiss (US 5687304) discloses a real-time image generation system for simulating physical paint, and feature modeling with 3-D graphics, wherein a user is allowed to paint directly on three-dimensional objects, and rendering the paint stroke in real-time so as to conform to a surface in 3-D painting. See Kiss at abstract and col. 3, lines 30-46. However, neither Maillot or Kiss or the combination thereof disclose a similar method that comprises the combined steps of: (a) allocating a plurality of texture elements in two dimensional texture space for a plurality of jacks of a virtual object; (b) graphically rendering the allocated texture elements in real time as a user applies at least one brush stroke onto the virtual object as represented in object space, wherein the rendering step comprises creating at least one blended texture that is at least temporarily bound to a graphics application during the rendering; and (b) updating at least one of the blended textures according to the at least one brush stroke applied by the user, wherein the method further comprises at least two of:

(i) using an index corresponding to each of a plurality of jacks of the virtual object to identify texture elements to which surface elements of the virtual object are mapped;

(ii) allocating texture in the texture space for at least one newly-created jack of the virtual object following an object modification; and

(iii) blending a set of texture layers corresponding to a first of a plurality of texture regions in the texture space and binding the blended texture to the graphics application during rendering of the first texture region.

For the aforementioned reason, the limitations of claims 52-62 of the instant application are allowed over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajous Wesner whose telephone number is **571-272-7791**. The examiner can normally be reached on Mondays thru Fridays between 11:00 and 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on **571-272-7778**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Art Unit: 2676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wesner Sajous -WS-



6/18/05



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600